

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

SEP 2 4 2014

REPLY TO THE ATTENTION OF:

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

Chris Imbrogno Regional Environmental Manager Carmeuse North America 9043 Highway 154 Butler, KY 41006

Re: Notice and Finding of Violation

Carmeuse Lime & Stone Buffington Operation

Gary, Indiana

Dear Mr. Imbrogno:

The U.S. Environmental Protection Agency is issuing the enclosed Notice and Finding of Violation (NOV/FOV) to Carmeuse Lime & Stone (you) under Section 113(a)(1) and (a)(3) of the Clean Air Act, 42 U.S.C. § 7413(a)(1) and (a)(3). We find that you are violating the Indiana State Implementation Plan and your Title 5 permit at your Gary, Indiana facility.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the NOV/FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Linda H. Rosen. You may call her at (312) 886-6810 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

George T. Czerniak

Director

Air and Radiation Division

Enclosure

cc: Phil Perry, Chief

Office of Air Quality/Compliance Branch Indiana Department of Environmental Management

David Olchawa Area Environmental Manager Carmeuse Lime and Stone Buffington Operation One North Carmeuse Drive Gary, Indiana 46402

Scott R. Dismukes Eckert Seaman Cherin & Mellot, LLC 600 Grant Street, 44th Floor Pittsburgh, PA 15219

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:)
Carmeuse Lime & Stone Buffington Operation) NOTICE OF VIOLATION and) FINDING OF VIOLATION
Gary, Indiana)
Proceedings Pursuant to Section 113(a)(1) and (a)(3))) EPA-5-14-IN-7
of the Clean Air Act, 42 U.S.C.)
§ 7413(a)(1) and (a)(3))

NOTICE AND FINDING OF VIOLATION

The U.S. Environmental Protection Agency (EPA) is issuing this Notice of Violation (NOV) and Finding of Violation (FOV) to Carmeuse Lime and Stone (Carmeuse or you), for violations of the Clean Air Act (the Act), 42 U.S.C. § 7401 et seq., at your lime manufacturing facility at One North Carmeuse Drive, Gary, Indiana.

This NOV/FOV is issued pursuant to Section 113(a)(1) and (a)(3) of the Act, 42 U.S.C. § 7413(a)(1) and (3). The authority to issue this NOV/FOV has been delegated to the Regional Administrator of EPA Region 5 and redelegated to the Director, Air and Radiation Division.

Statutory and Regulatory Background

1. The Act is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its populations. Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).

Prevention of Significant Deterioration

2. When the Act was passed in 1970, Congress exempted existing facilities, such as the lime manufacturing plant that is the subject of this Notice, from many of its requirements. However, Congress also made it quite clear that this exemption would not last forever. As the United States Court of Appeals for the D.C. Circuit explained,"[t]he statutory scheme intends to 'grandfather' existing industries; but...this is not to constitute a perpetual immunity from all standards under the PSD program." Alabama Power v. Costle, 636 F.2d 323, 400 (D.C. Cir. 1979). Rather, when a grandfathered facility intends to perform modifications at the facility that may significantly increase emissions, the Act requires the company to install modern pollution control devices.

- 3. The Prevention of Significant Deterioration (PSD) provisions of Part C of Title I of the Act, 42 U.S.C. §§ 7470-7492, and their implementing regulations at 40 C.F.R. § 52.21 (collectively "the PSD program"), establish specific pre-construction requirements applicable to the construction and modification of "major emitting facilities" located in areas designated as either attainment or unclassifiable for purposes of meeting the National Ambient Air Quality Standards.
- 4. The PSD program prohibits, among other things, a "major emitting facility" from constructing a "major modification" unless it has obtained a PSD permit that applies "Best Available Control Technology" (BACT) to control emissions from the proposed modified emissions unit, and conduct an analysis to determine the air quality impacts of the modification. Sections 165(a) and 169(2)(C) of the Act, 42 U.S.C. §§ 7475(a) and 7479(2)(C), and 40 C.F.R. § 52.21(i).
- 5. Pursuant to Section 169 of the Act, 42 U.S.C. § 7479(1), a "major emitting facility" is defined to include any lime plant which emits, or has the potential to emit, 100 tons per year or more of any regulated PSD pollutant.
- 6. Sections 110(a) and 161 of the Act, 42 U.S.C. §§ 7410(a) and 7471, require each state to adopt a state implementation plan (SIP) containing regulations implementing the PSD program.
- 7. A state may comply with Sections 110(a) and 161 of the Act, 42 U.S.C. §§ 7410(a) and 7471, by having its own PSD regulations approved by EPA as part of its SIP, provided that the state PSD regulations are at least as stringent as those set forth at 40 C.F.R. § 51.166.
- 8. Pursuant to 40 C.F.R. § 52.21(a), if a state does not have PSD regulations that EPA has approved and incorporated into its SIP, EPA may incorporate the federal PSD regulations set forth at 40 C.F.R. § 52.21 into the SIP.
- 9. Pursuant to 40 C.F.R. § 52.23, any person failing to comply with an approved regulatory provision of a SIP is subject to an enforcement action under Section 113 of the Act, 42 U.S.C. § 7413.
- 10. On August 7, 1980, EPA disapproved Indiana's proposed PSD program, and incorporated by reference the PSD regulations of 40 C.F.R. § 52.21(b) through (w) into the Indiana SIP. 45 Fed. Reg. 52676, 52741. On September 30, 1980, EPA delegated to the Indiana Department of Environmental Management (IDEM) certain authorities of the federal PSD program. 46 Fed. Reg. 9580, 9583. On March 3, 2003, EPA conditionally approved Indiana's PSD regulations at 326 Indiana Administrative Code (IAC) 2-2. 68 Fed. Reg. 9892 (effective April 2, 2003). On May 20, 2004, EPA provided final approval of 326 IAC Rule 2-2 into the Indiana SIP. 69 Fed. Reg. 29071 (effective July 19, 2004). On June 18, 2007, EPA partially approved revisions to 326 IAC 2-2 related to EPA's New Source Review (NSR) Reform regulations. 72 Fed. Reg. 33395 (effective July 18, 2007).

- 11. At all times relevant to these alleged violations, the PSD regulations included as part of Indiana's federally approved SIP were applicable and federally enforceable.
- 12. 326 IAC 2-1.1-3(a) of the Indiana SIP prohibits any person from commencing construction or modification of any air pollution source without first applying for and obtaining a construction permit from the commissioner of IDEM.
- 13. 326 IAC 2-1-3(c) requires any person proposing the construction or modification of a major stationary PSD source or major PSD modification, which is or which will be located in an attainment area or unclassified area, to comply with the requirements of 326 IAC 2-2 of the Indiana SIP.
- 14. 326 IAC 2-2-2 of the Indiana SIP states that new or modified major stationary sources or major modifications, constructed in an area designated as attainment, are subject to 326 IAC 2-2, which contains the PSD provisions of the Indiana SIP.
- 15. 326 IAC 2-2-1(ff)(2) of the Indiana SIP defines a "major stationary source" in an attainment area to include any lime plant with the potential to emit 100 tons per year or more of any regulated NSR pollutant.
- 16. 326 IAC 2-2-1(dd) of the Indiana SIP defines a "major modification" as any physical change in or change in the method of operation of a major stationary source that would result in a significant emissions increase and a significant net emission increase of a regulated NSR pollutant from the major stationary source.
- 17. 326 IAC 2-2-1(ii) of the Indiana SIP defines "net emissions increase" as the amount by which the sum of the increase in emissions from a physical change or change in the method of operation and any other contemporaneous increases or decreases in emissions exceeds zero.
- 18. For nitrogen oxides (NOx), 326 IAC 2-2-1(ww) of the Indiana SIP defines "significant" with regard to a net emissions increase as a rate of emissions that would equal or exceed 40 tons per year.
- 19. 326 IAC 2-2-3(3) of the Indiana SIP requires that owners or operators making a major modification apply best available control technology (BACT) for each regulated NSR pollutant for which the modification would result in a significant net emissions increase.
- 20. 326 IAC 2-2-1(i) of the Indiana SIP defines BACT as an emissions limitation based on the maximum degree of reduction for each regulated NSR pollutant that would be emitted from any proposed major modification while taking into account energy, environmental, and economic impacts and other costs.
- 21. 326 IAC 2-2-5 of the Indiana SIP requires that owners or operators of a proposed major modification demonstrate that allowable emission increases, in conjunction with all other applicable emission increases or reductions, will not cause or contribute to air pollution in violation of any ambient air quality standard or applicable maximum allowable increase over the baseline concentration in any area.

Sulfur Dioxide SIP Requirements for Lake County, Indiana

- 22. On September 26, 2005, EPA approved 326 IAC 7-4.1 (1-21) which contains sulfur dioxide (SO₂) emission limitations for specific sources in Lake County, Indiana, effective October 26, 2005. 70 Fed. Reg. 56129. 326 IAC 7-4.1-6 contains the SO₂ limitations applicable to Carmeuse which are incorporated into Carmeuse's Title 5 Operating Permit at D.1.2.
- 23. 326 IAC 7-4.1-6 and Carmeuse's Title 5 permit at D.1.2. state that Carmeuse shall comply with the following SO₂ limitations for Rotary Kilns 1 through 5 at its Buffington Plant, as follows:
 - (1) When three (3) or fewer kilns are in operation at the same time, the SO₂ emissions are not to exceed: (A) two and ninety-four thousandths (2.094) pounds per ton of lime based on a one (1) hour average; and (B) forty-eight (48) pounds per hour per operating kiln.
 - (2) When four (4) kilns are in operation at the same time, the SO₂ emissions are not to exceed: (A) one and seven hundred forty-five thousandths (1.745) pounds per ton of lime based on a one (1) hour average; and (B) forty (40) pounds per hour per operating kiln.
 - (3) When five (5) kilns are in operation at the same time, the SO₂ emissions are not to exceed: (A) one and four hundred eighty-three thousandths (1.483) pounds per ton of lime based on a one (1) hour average; and thirty-four (34) pounds per hour per operating kiln.
- 24. 326 IAC 7-4.1-2(d) and Carmeuse's Title 5 permit state that compliance with 326 7-4.1-6 may be determined by conducting a stack test for SO₂ from the kilns, using 40 C.F.R. Part 60, Appendix A, Method 6.

Title 5 Requirements

- 25. Section 502(a) of the Act, 42 U.S.C. § 7661(a), provides that no source may operate without a Title 5 permit after the effective date of any permit program approved or promulgated under Title 5 of the Act. EPA first promulgated regulations governing state operating permit programs on July 21, 1992. See 57 Fed. Reg. 32295; 40 C.F.R. Part 70. EPA promulgated regulations governing the federal operating permit program on July 1, 1996. See 61 Fed. Reg. 34228; 40 C.F.R. Part 71.
- 26. Section 503 of the Act, 42 U.S.C. § 7661b, sets forth the requirement to submit a timely, accurate, and complete application for a permit, including information required to be submitted with the application.
- 27. Section 504(a) of the Act, 42 U.S.C § 7661c(a), requires that each Title 5 permit include enforceable emission limitations and standards, a schedule of compliance, and other conditions necessary to assure compliance with applicable requirements, including those contained in a SIP.

- 28. 40 C.F.R. § 70.1(b) provides that: "All sources subject to these regulations shall have a permit to operate that assures compliance by the source with all applicable requirements." See 326 IAC 2-7-2.
- 29. 40 C.F.R. § 70.2 defines "applicable requirement" to include, "[a]ny standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under title 1 of the Act that implements the relevant requirements of the Act, including revisions to that plan promulgated in part 52 of this chapter..."
- 30. 40 CFR § 70.7(b) provides that no source subject to 40 C.F.R. Part 70 requirements may operate without a permit as specified in the Act. See also 326 IAC 2-7-2.
- 31. 40 C.F.R. § 70.5(a) and (c) require timely and complete permit applications for Title 5 permits with required information that must be submitted and 40 C.F.R. 70.6 specifies required permit content. See also 326 IAC 2-7-2.
- 32. 40 C.F.R. § 70.5(b) provides that: "Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit." See also 326 IAC 2-7-2.

Indiana's Title 5 Requirements

- 33. EPA granted interim approval of the Indiana Title 5 program on November 14, 1995, with an effective date of December 14, 1995. 60 Fed. Reg. 57188. EPA fully approved the Indiana Title 5 program on December 4, 2001, effective on November 30, 2001. 66 Fed. Reg. 62969.
- 34. The Indiana regulations governing the Title 5 permit program are codified at 326 IAC 2-7 and are federally enforceable pursuant to Section 113(a)(3) of the Act.
- 35. 326 IAC 2-7-3 provides that it is unlawful to violate any requirement of a permit issued under Title 5 or to operate a major source except in compliance with a permit issued by a permitting authority under Title 5.
- 36. 326 IAC 2-7-5 provides that each Title 5 permit must include, among other things, enforceable emission limitations and standards that are necessary to assure compliance with applicable requirements of the Act and the requirements of the applicable SIP.
- 37. 326 IAC 2-7-4 requires that a source submit a complete permit application which, among other things, identifies all applicable requirements and certifies compliance with all applicable requirements.

Findings of Fact and Conclusions of Law

- 38. Carmeuse is a corporation authorized to do business in Indiana.
- 39. Carmeuse is a "person" as that term is defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e).
- 40. At all times relevant to this Notice, Carmeuse owned and operated emission units at its lime manufacturing facility at One North Carmeuse Drive, Gary, Lake County, Indiana ("Buffington Plant").
- 41. The Buffington Plant consists of five rotary lime kilns, Kilns 1-5, in which either dolomite (Dolo) or Hi Calcium (Hi Cal) limestone is converted into lime by thermal conversion caused by the combustion of fuel.
- 42. The Buffington Plant is a "major stationary source," as that term is defined in the Indiana SIP at 326 IAC 2-3-1(ff)(2), in that it is a lime plant that emits, or has the potential to emit, several regulated NSR pollutants in excess of 100 tons per year.
- 43. Lake County, Indiana, was designated as nonattainment for ozone on April 30, 2004. 69 Fed. Reg. 23857. On March 12, 2010, EPA proposed a rulemaking to reclassify Lake County as attainment for ozone, which was effective May 11, 2010. 75 Fed. Reg. 12090 and 75 Fed. Reg. 26113.
- The Buffington Plant is located in Lake County, Indiana, which at all times relevant to this Notice was classified as attainment for NO₂.
- 45. On November 16, 2009, IDEM issued to Carmeuse a Title 5 Part 70 Operating Permit for the Buffington Plant, No. 089-27040-00112 (Title 5 permit).
- 46. On March 6, 2012, EPA inspected the Buffington Plant. On November 7, 2012, EPA issued Carmeuse a Request for Information Pursuant to the Clean Air Act.
- 47. In or around June of 2010, Carmeuse installed kiln internals in Kiln 5. Carmeuse did not submit a permit application for this project.
- 48. In or around November 2010, Carmeuse installed a hot face dam in Kiln 3.
- 49. On July 27, 2010, Carmeuse submitted a written request for a minor source modification to allow it to install a hot face dam in Kiln 3. On November 12, 2010, IDEM issued Carmeuse a minor source modification to install a hot face dam on Kiln 3. On January 17, 2011, Carmeuse requested to withdraw its application for the significant permit modification that would approve the operation of a hot face dam in Kiln 3. On February 7, 2011, IDEM revoked the minor source modification approving the construction of a hot face dam in Kiln 3.
- 50. On November 6, 2012, Carmeuse had SO₂ emission stack testing conducted on Kiln 2.

51. On November 7, 2012, Carmeuse had SO₂ emission stack testing conducted on Lime Kiln 1.

NOTICE AND FINDING OF VIOLATIONS

Violations of PSD

- 52. The projects described in paragraphs 47 and 48 each caused a significant net emissions increase in NOx, as defined in 326 IAC 2-2-1(ww).
- 53. The projects described in paragraphs 47 and 48 each constitute a "major modification," as that term is defined in 326 IAC 2-2-1(dd).
- 54. Carmeuse failed to apply for an/or obtain a PSD permit prior to commencing construction of each of the activities described in paragraphs 47 and 48, and failed to install and operate BACT for NOx, as required by 326 IAC 2-1-3(c).
- 55. Carmeuse, therefore, violated and continues to violate the PSD requirements found at Section 165 of the Act, 42 U.S.C. § 7475, and the Indiana SIP.

Violations of SO₂ SIP

- Based on the November 7, 2012, stack testing and records provided by Carmeuse, Kiln 1 exceeded the SO₂ limits of 48 lb/hr and 1.483 lb/ ton of lime limits in the Indiana SIP and Carmeuse's Title 5 permit, in violation of the Indiana SIP at 326 IAC 7-4.1-6 and the Title 5 permit.
- 57. Based on the November 6, 2012, stack testing and records provided by Carmeuse, Kiln 2 exceeded the SO₂ limits of 48 lb/hr and 1.483 lb/ ton of lime limits in the Indiana SIP and the Title 5 permit, in violation of the Indiana SIP at 326 IAC 7-4.1-6 and the Title 5 permit.

Violations of Title 5 Permit Program

58. Carmeuse is in violation of the Title 5 permitting requirements at Section 503 of the Act and 40 C.F.R. Part 70 because it failed and continues to fail to submit a timely and complete application for a Title 5 operating permit for the Buffington facility that: (i) includes information pertaining to the construction and operation of the projects described in paragraphs 47 and 48; (ii) identifies all applicable requirements including, but not limited to the requirement to apply, install and operate BACT for NOx; (iii) accurately certifies compliance with such requirements; and (iv) contains a compliance plan for all applicable requirements for which it is not in compliance.

Enforcement Authority

59. Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1), provides that at any time after the expiration of 30 days following the date of the issuance of a Notice of Violation, the Administrator may, without regard to the period of violation, issue an order requiring

compliance with the requirements of the applicable SIP, issue an administrative penalty order pursuant to Section 113(d), or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties.

60. Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), provides in part that if the Administrator finds that a person has violated, or is in violation of any requirement or prohibition of any rule promulgated under Title 5 of the Act, the Administrator may issue an administrative penalty order under Section 113(d), issue an order requiring compliance with such requirement or prohibition, or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties.

Environmental Impact of Violations

61. These violations have caused or can cause excess emissions of NOx and SO₂. NOx is a precursor of ground-level ozone.

Ozone: Breathing ozone contributes to a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level ozone also can reduce lung function and inflame lung tissue. Repeated exposure may permanently scar lung tissue.

Nitrogen Oxides: Current scientific evidence links short-term NOx exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. In addition, studies show a connection between breathing elevated short-term NOx concentrations, and increased hospital admissions for respiratory issues, especially asthma.

<u>Sulfur Dioxide</u>: Current scientific evidence links short-term exposures to SO₂ ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects including bronchoconstriction and increased asthma symptoms.

Date

George T. Czerniak
Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, No. EPA-5-14-IN-7, by Certified Mail, Return Receipt Requested, to:

Chris Imbrogno Regional Environmental Manager Carmeuse North America 9043 Highway 154 Butler, KY 41006

I also certify that I sent copies of the Notice and Finding of Violation by first-class mail to:

Phil Perry, Chief Office of Air Quality/Compliance Branch IDEM

David Olchawa Area Environmental Manager Carmeuse Lime and Stone Buffington Operation One North Carmeuse Drive Gary, Indiana 46402

Scott Dismukes, Attorney Eckert Seamans Cherin & Mellott, LLC U.S. Steel Tower 600 Grant Street, 44th Floor Pittsburgh, PA 15219

On the 24 day of September 2014

Loretta Shaffer, Program Technician

AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 70091680 0000 7672 9062